

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An exhaust gas purifying system for an internal combustion engine, comprising:
 - an exhaust gas purifying device disposed in an exhaust passage of the engine to remove specific content from exhaust gas; and
 - a control unit arranged:
 - to determine a recovery execution timing of executing recovery processing for recovering the exhaust gas purifying device from a specific content stacked state;
 - to determine a target air/fuel ratio for executing the recovery processing;
 - to determine a first engine controlled variable relating to an air/fuel ratio on the basis of the target air/fuel ratio; and
 - to determine a second engine controlled variable relating to a combustion period, at a value different from a value employed during normal processing, when the recovery processing is executed,

wherein the second engine controlled variable includes one of a main injection timing, a pilot injection quantity and a pilot injection timing.
2. (Original) The exhaust gas purifying system as claimed in claim 1, wherein the control unit is further arranged to increase a temperature of the exhaust gas so as to be higher than a temperature during the normal processing by changing the second engine controlled variable.

3. (Canceled)

4. (Original) The exhaust gas purifying system as claimed in claim 3, wherein the main injection timing is retarded after a top dead center, and the pilot injection timing is advanced.

5. (Original) The exhaust gas purifying system as claimed in claim 1, further comprising an exhaust gas temperature sensor for detecting an exhaust gas temperature of the exhaust gas, the control unit being further arranged to determine a unusual basic value for the second engine controlled variable and to determine the second engine controlled variable by correcting the unusual basic value on the basis of the exhaust gas temperature.

6. (Original) The exhaust gas purifying system as claimed in claim 1, wherein the target air/fuel ratio for the recovery processing is richer than the target air/fuel ratio for the normal processing.

7. (Original) The exhaust gas purifying system as claimed in claim 1, wherein the exhaust gas purifying device includes a particulate filter which removes particulates in the exhaust gas.

8. (Original) The exhaust gas purifying system as claimed in claim 1, wherein the exhaust gas purifying device includes a NOx trap catalyst for trapping NOx in the exhaust gas and discharging the trapped NOx according to the air/fuel ratio.

9. (Original) The exhaust gas purifying system as claimed in claim 1, further comprising an air/fuel ratio detector for detecting an air/fuel ratio, the control unit being further arranged to determine a basic value of the first engine controlled variable according to the target air/fuel ratio and to determine the first engine controlled variable by correcting the basic value on the basis of the detected air/fuel ratio.

10. (Original) The exhaust gas purifying system as claimed in claim 9, wherein the control unit is further arranged to determine the first engine controlled variable by correcting the basic value on the basis of the detected air/fuel ratio when the target air/fuel ratio is richer than or equal to a stoichiometric air/fuel ratio, and to change a fuel injection quantity according to the first engine controlled variable.

11. (Original) The exhaust gas purifying system as claimed in claim 9, wherein the control unit is further arranged to determine the first engine controlled variable by correcting the basic value on the basis of the detected air/fuel ratio, and to change an intake air quantity according to the first engine controlled variable.

12. (Original) The exhaust gas purifying system as claimed in claim 1, wherein the control unit is further arranged to correct the first engine controlled variable on the basis of the second engine controlled variable.

13. (Currently Amended) An exhaust gas purifying system for an internal combustion engine, comprising:

an exhaust gas purifying device disposed in an exhaust passage of the engine to remove specific content from exhaust gas; and

a control unit arranged;

to determine whether recovery processing for recovering the exhaust gas purifying device as to accumulated specific contents in the exhaust gas purifying device is executed; and

to increase an exhaust gas temperature at a temperature higher than an exhaust gas temperature during a normal control, by setting an air/fuel ratio at a target air/fuel ratio and by controlling ~~the~~ a combustion period while maintaining the air/fuel ratio at the target air/fuel ratio when the recovery processing is executed,

wherein the controlling the combustion period comprises setting an engine controlled variable relating to the combustion period, and the engine controlled variable includes one of a main injection timing, a pilot injection quantity and a pilot injection timing.

14. (Currently Amended) A method of executing recovery processing of an exhaust gas purifying device disposed in an exhaust passage of an internal combustion engine, comprising:

determining a recovery execution timing for recovery processing of recovering the exhaust gas purifying device from a specific content stacked state;

setting a target air/fuel ratio for executing the recovery processing;

setting a first engine controlled variable relating to an air/fuel ratio on the basis of the target air/fuel ratio; and

setting a second engine controlled variable relating to a combustion period, at a value different from a value employed during normal processing, when the recovery processing is executed,

wherein the second engine controlled variable includes one of a main injection timing, a pilot injection quantity and a pilot injection timing.

15. (Currently Amended) An exhaust gas purifying system for an internal combustion engine, comprising:

exhaust gas purifying means for removing specific content from exhaust gas, the exhaust gas purifying means being disposed in an exhaust passage of the engine;

recovery timing determining means for determining a recovery execution timing for recovery processing of recovering the exhaust gas purifying device from a specific content stacked state;

recovery mode target air/fuel ratio setting means for setting a target air/fuel ratio for executing a recovery of the exhaust gas purifying device;

first engine controlled variable setting means for setting a first engine controlled variable relating to an air/fuel ratio on the basis of the target air/fuel ratio; and

second engine controlled variable setting means for setting a second engine controlled variable relating to a combustion period, at a value different from a value employed during normal processing, when the recovery processing is executed, the second engine controlled variable including at least one of a main injection timing, a pilot injection quantity and a pilot injection timing.